

(12) UK Patent (19) GB (11) 2 107 445 B

SCIENCE REFERENCE LIBRARY

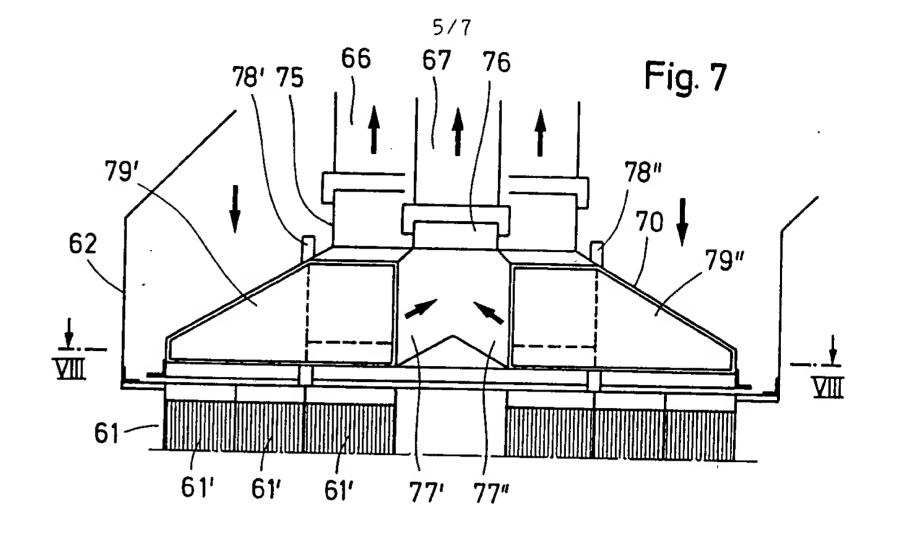
(54) Title of invention

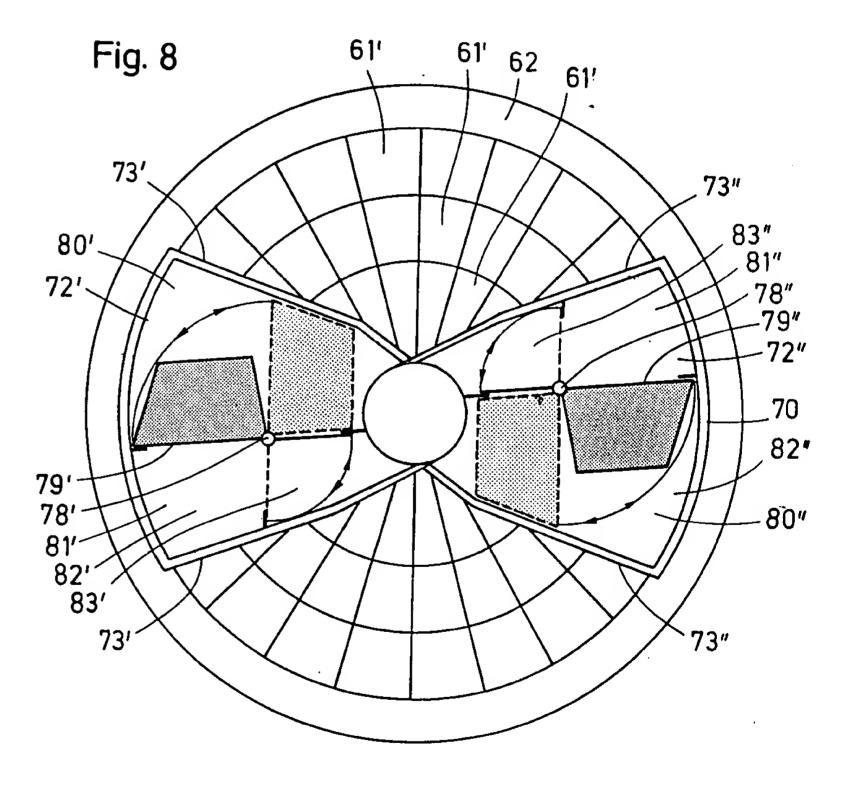
Rotary regenerative air preheater

(51) INT CL3; F28D 17/04

- (21) Application No 8228443
- (22) Date of filing 5 Oct 1982
- (30) Priority data
 - (31) 3140406
 - (32) 12 Oct 1981
 - (33) Fed. Rep. of Germany (DE)
- (43) Application published 27 Apr 1983
- (45) Patent published 6 Feb 1985
- (52) Domestic classification F4K 24A2 25U
- (56) Documents cited GB 1572022
 - GB 1431289
 - GB 1344589
 - GB 1330615
 - GB 1022356 GB 0595465
 - GB 0311889 GB 0275231
- (58) Field of search
 - F4K

- (73) Proprietor Apparatebau Rothemuhle Brandt & Kritzler GmbH (FR Germany), Wildenburger Strasse 5963 Wenden 5 Rothemuhle Federal Republic of Germany
- (72) Inventors Heinz Reidick Reinhard Leithner Franz-Josef Kirchhoff **Ernst Puritz** Siegfried Schluter
- (74) Agent and/or Address for Service Mewburn Ellis & Co., 2/3 Cursitor Street London EC4A 1BQ





CLAIMS:

- 1. A rotary regenerative air preheater with capacity for the separate heating of two flows of medium both of which flow to and from the heat exchange matrix through which a heat-emitting medium also flows, the said two
- flows being through a hood at each end of the matrix,
 the hoods and matrix being relatively rotatable about an
 axis of rotation, the hoods being invariable in their
 boundaries but being subdivided internally to define
 distinct respective paths for the said two flows, the
- subdivision being adapted to be adjustable to vary the size and/or position of one of the two flows relative to the other, and the hoods.
- 2. A rotary regenerative air preheater according to Claim 1 wherein there are three flow-compartments within the hoods, two being respectively occupied by the two flows, the third being connectable to either of the other two.
 - 3. A rotary regenerative air preheater according to Claim 1 wherein walls forming the subdivision are movable
- 20 in rotation relative to the radial boundaries of the .
 hoods, about the axis of rotation of the preheater.
 - 4. A rotary regenerative air preheater according to Claim 1 or Claim 3 wherein walls forming the subdivision are or are also radially adjustable.
- 25 5. A rotary regenerative air preheater according to Claim l wherein walls forming the subdivision are pivot-

able about an axis lying eccentric of the axis of relative rotation of the preheater whereby to enable division of the hoods either tangentially or radially.

6. Rotary regenerative air preheater substantially as herein described with reference to and as illustrated in Figs. 1 and 2, Figs. 3 and 4, Figs. 5 and 6, Figs. 7 and 8, Figs. 9 and 10 or Figs. 11 and 12 of the accompanying drawings.